

REMARKS

Claims 1-18 are pending. Claims 1, 7-10, and 12 are rejected, and the remaining pending claims 2-6, 11 and 13-18 are objected to. The Examiner indicates that the claims that are objected to would be allowable if rewritten in independent form. Applicants herein cancel claim 2 as its recitations are now included in claim 1. Also, Applicants cancel claims 7 to 12 without prejudice. Moreover, some recitations of claim 8 are added into claims 13 and 14 that previously depended therefrom. As such, upon entry of the instant Amendment and Response, claims 1, 3-6, and 13-18 will be pending. In addition, Applicants herein make some minor changes replacing the expression "The process" for "Process" as suggested by the Examiner. Further, "wherein" is inserted instead of "characterized in that" in order to adapt claims to the established United States patent practice.

Claim Objections

Claims 1-18 are objected to because of certain informalities. Applicants acknowledge the Examiner's comments regarding the allowability of the claims. Consequently, purely in the interest of advancing prosecution and securing rapid allowance of a patent, Applicants herein amend the claims in the manner suggested by the Examiner. Applicants herein replacing "Process" by "A process" in claim 1. Further, minor changes are made to clarify the steps in amended claim 1. Also, the recitations of original claim 2 are introduced into claim 1. Applicants respectfully submit that since claim 2 was considered allowable by the Examiner, the new independent claim 1 should now be regarded as patentable since it incorporates all of the recitations of claim 2.

Claim Rejections 35 USC Section 103

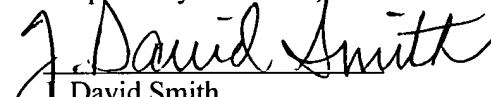
Claims 1, 7-10 and 12 are rejected under 35 USC Section 103(a) as unpatentable over Schmidl *et al.*, U.S. Patent 5,732,113 in view of Jones *et al.*, U.S. Patent 6,876,675. Applicants respectfully submit that since claim 2 was considered allowable by the Examiner, the new independent claim 1 should now be regarded as patentable since it incorporates all of the recitations of claim 2. The remaining claims are also necessarily patentable as depending from claim 1, now amended.

Applicants respectfully submit for the record that Schmidl *et al.* use terms and expressions analogous to the present application. Nevertheless, the sense in each document is not the same. In the present application “*frequency synchronization*” refers to obtaining the sampling frequency error. On the contrary, Schmidl *et al.* use the same expression for obtaining the IQ frequency offset. Further, Schmidl *et al.* teach that obtaining the sampling frequency error is a minor concern. The Examiner is respectfully referred to Col. 21, lines 14-15 where Schmidl *et al.* teach “*As mentioned previously, sampling frequency offset is a secondary consideration in OFDM receivers...*” Still further, Schmidl *et al.* teach a method/apparatus mainly focused on TV digital broadcast. In this respect Applicants submit that a system capable of working over the power network has different requirements. Several needs must be taken into consideration when the system intends to use the power network as a channel for transmission. These limitations are not considered by the teachings of Schmidl *et al.* For instance, some of these limitations include that the claimed invention has to deal with many more bits per carrier and a noisier channel. The present invention is based on two steps as follows: (1) performing time synchronization; and (2) obtaining sampling frequency error.

Conclusion

In view of the foregoing, entry of Applicants’ amendments, withdrawal of the outstanding rejections and allowance of the claims, are believed to be in order and are courteously solicited.

Respectfully submitted,


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